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Term: L13 not l11

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Search History

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Set Name Query
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DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ

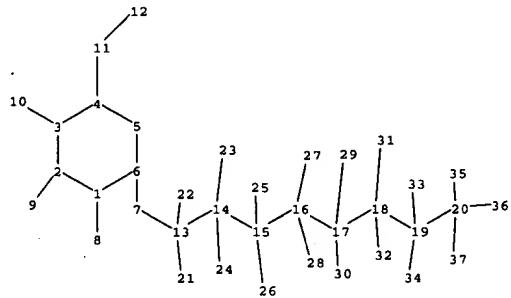
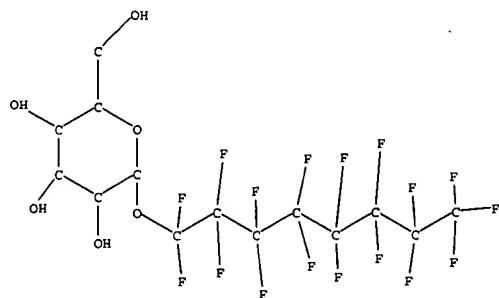
		Hit Count	Set Name
		result set	
<u>L14</u>	L13 not l11	3	<u>L14</u>
<u>L13</u>	I2 and I3 and I10	16	<u>L13</u>
<u>L12</u>	L11 not I9	11	<u>L12</u>
<u>L11</u>	I8 and I10	13	<u>L11</u>
<u>L10</u>	perfluoro\$	36673	<u>L10</u>
<u>L9</u>	I8 and I4	2	<u>L9</u>
<u>L8</u>	I2 same I3	979	<u>L8</u>
<u>L7</u>	I2 and I3	1122	<u>L7</u>
<u>L6</u>	I3 same I4	0	<u>L6</u>
<u>L5</u>	I2 same I4	4	<u>L5</u>
<u>L4</u>	perfluoroalkyl	19858	<u>L4</u>
<u>L3</u>	diamagnetic	3745	<u>L3</u>
<u>L2</u>	paramagnetic	10062	<u>L2</u>

DB=USPT; PLUR=YES; OP=ADJ

6300296.pn. or 5886109.pn. or 5846516.pn. or 5786469.pn. or 5679459.pn. or <u>L1</u> 5567765.pn. or 5502094.pn. or 5491083.pn. or 5384254.pn. or 5342772.pn. or 5243037.pn. or 4960951.pn. or 4957904.pn.	13	<u>L1</u>
---	----	-----------

END OF SEARCH HISTORY

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chain nodes :

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37																	

ring nodes :

1	2	3	4	5	6
---	---	---	---	---	---

chain bonds :

1-8	2-9	3-10	4-11	6-7	7-13	11-12	13-14	13-21	13-22	14-15	14-23	14-24	15-16
15-25	15-26	16-17	16-27	16-28	17-18	17-29	17-30	18-19	18-31	18-32	19-20	19-33	
19-34	20-35	20-36	20-37										

ring bonds :

1-2	1-6	2-3	3-4	4-5	5-6
-----	-----	-----	-----	-----	-----

exact/norm bonds :

1-2	1-6	1-8	2-3	2-9	3-4	3-10	4-5	5-6	6-7	7-13	11-12
-----	-----	-----	-----	-----	-----	------	-----	-----	-----	------	-------

exact bonds :

4-11	13-14	13-21	13-22	14-15	14-23	14-24	15-16	15-25	15-26	16-17	16-27	16-28
17-18	17-29	17-30	18-19	18-31	18-32	19-20	19-33	19-34	20-35	20-36	20-37	

Match level :

1:Atom	2:Atom	3:Atom	4:Atom	5:Atom	6:Atom	7:CLASS	8:CLASS	9:CLASS	10:CLASS
11:CLASS	12:CLASS	13:CLASS	14:CLASS	15:CLASS	16:CLASS	17:CLASS	18:CLASS	19:CLASS	
20:CLASS	21:CLASS	22:CLASS	23:CLASS	24:CLASS	25:CLASS	26:CLASS	27:CLASS	28:CLASS	
29:CLASS	30:CLASS	31:CLASS	32:CLASS	33:CLASS	34:CLASS	35:CLASS	36:CLASS	37:CLASS	

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NEWS 4 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update frequency
NEWS 5 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 6 Mar 08 Gene Names now available in BIOSIS
NEWS 7 Mar 22 TOXLIT no longer available
NEWS 8 Mar 22 TRCTHERMO no longer available
NEWS 9 Mar 28 US Provisional Priorities searched with P in CA/CAplus and USPATFULL
NEWS 10 Mar 28 LIPINSKI/CALC added for property searching in REGISTRY
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NEWS 15 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 16 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 17 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 18 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 19 Jun 03 New e-mail delivery for search results now available
NEWS 20 Jun 10 MEDLINE Reload
NEWS 21 Jun 10 PCTFULL has been reloaded
NEWS 22 Jul 02 FOREGE no longer contains STANDARDS file segment

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002

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5491083 4957904
5342772
5243037

FILE 'HOME' ENTERED AT 12:26:48 ON 16 JUL 2002

| => fil reg
COST IN U.S. DOLLARS | SINCE FILE
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SESSION |
|------------------------------------|---------------------|------------------|
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DICTIONARY FILE UPDATES: 14 JUL 2002 HIGHEST RN 438526-30-8

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when
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Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e [(1-perfluorooctylsulfonylpiperazine-4-carbonyl)-methyl]-mannopyranose/cn
***** START OF FIELD *****
E3 0 --> (1-PERFLUOROOCTYL SULFONYL PIPERAZINE-4-CARBONYL)-METHYL-MANN
OPYRANOSE/CN
E4 1 !-BUTANAMINE, N-BUTYL-,
((1,2-.ETA.)-DECAHYDRODECABORATO(2-)
-.KAPPA.H1,.KAPPA.H2) CUPRATE(1-)/CN
E5 1 'HUMAN ALPHA-CATENIN' (HUMAN)/CN
E6 1 'HYG' TYPE I POLYKETIDE SYNTHASE (STREPTOMYCES
HYGROSCOPICUS
CLONE PAL58/PAL16 MODULE 1 REDUCED)/CN
E7 1 'HYG' TYPE I POLYKETIDE SYNTHASE (STREPTOMYCES
HYGROSCOPICUS
CLONE PAL58/PAL16 MODULE 2 REDUCED)/CN
E8 1 'HYG' TYPE I POLYKETIDE SYNTHASE (STREPTOMYCES
HYGROSCOPICUS
CLONE PAL58/PAL16 MODULE 3 REDUCED)/CN
E9 1 'HYG' TYPE I POLYKETIDE SYNTHASE (STREPTOMYCES
HYGROSCOPICUS
CLONE PAL58/PAL16 MODULE 4 REDUCED)/CN
E10 1 'UPENAMIDE/CN
E11 1 'UPENAMIDE DIOL/CN
E12 1 'UPENAMIDE S-MTPA ESTER/CN

=> e mannopyranose/cn
E1 1 MANNOPYRANO(2,3-D) OXAZOLE,
4,6-O-BENZYLIDENE-1-O-METHYL-2'-P
HENYL-, .ALPHA.-D-/CN
E2 1 MANNOPYRANO(2,3-D) OXAZOLE,
4,6-O-BENZYLIDENE-2'-(P-METHOXYPH

E3 1 --> ENYL) -1-O-METHYL-, .ALPHA.-D-/CN
 E4 1 MANNOPYRANOSE/CN
 E5 1 MANNOPYRANOSE, .ALPHA.-D-/CN
 E6 1 MANNOPYRANOSE, .ALPHA.-D-, 1.FWDARW.6-POLYMERS/CN
 E7 1 MANNOPYRANOSE, .ALPHA.-D-, POLYMERS/CN
 E8 1 MANNOPYRANOSE, .BETA.-D-/CN
 E9 1 MANNOPYRANOSE, 1,1'-DITHIOBIS(1-DEOXY-/CN
 E10 1 MANNOPYRANOSE, 1,2,3,4,6-PENTAKIS-O-(TRIMETHYLSILYL)-/CN
 .BETA.
 .-D-/CN
 E11 1 MANNOPYRANOSE, 1,2,3,4-TETRAACETATE 6-METHANESULFONATE,
 .BET
 A.-D-/CN
 E12 1 MANNOPYRANOSE, 1,2,3,4-TETRAACETATE, .BETA.-D-/CN

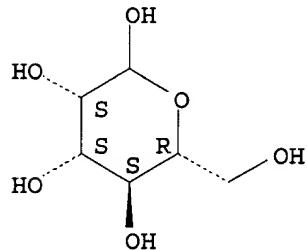
=> s e3

L1 1 MANNOPYRANOSE/CN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
 RN 46032-76-2 REGISTRY
 CN **Mannopyranose (6CI, 7CI, 9CI)** (CA INDEX NAME)
 FS STEREOSEARCH
 MF C6 H12 O6
 CI COM
 LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, USPATFULL
 (*File contains numerically searchable property data)

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> e perflurooctylsulfonylpiperazine/cn
 E1 1 PERFLUROHEXYLMETHYL METHACRYLATE-TRIETHOXYVINYLSILANE
 COPOLY MER/CN
 E2 1 PERFLUROOCTYLMETHANOL/CN
 E3 0 --> PERFLUROOCTYLSULFONYLPIPERAZINE/CN
 E4 1 PERFLUTREN/CN
 E5 1 PERFOL PK 4/CN

| | | |
|-----|---|---------------------|
| E6 | 1 | PERFOLIATUMIN A/CN |
| E7 | 1 | PERFOLIATUMIN B/CN |
| E8 | 1 | PERFOMEDIL/CN |
| E9 | 1 | PERFORAQUASSIN A/CN |
| E10 | 1 | PERFORAQUASSIN B/CN |
| E11 | 1 | PERFORAQUASSIN C/CN |
| E12 | 1 | PERFORATIC ACID/CN |

=> e perfluroroctyl/cn

| | | |
|-----|---|--|
| E1 | 1 | PERFLUROHEXYLMETHYL METHACRYLATE-TRIETHOXYVINYLSILANE COPOLY |
| | | MER/CN |
| E2 | 1 | PERFLUROOCTYLMETHANOL/CN |
| E3 | 0 | --> PERFLUROROOCTYL/CN |
| E4 | 1 | PERFLUTREN/CN |
| E5 | 1 | PERFOL PK 4/CN |
| E6 | 1 | PERFOLIATUMIN A/CN |
| E7 | 1 | PERFOLIATUMIN B/CN |
| E8 | 1 | PERFOMEDIL/CN |
| E9 | 1 | PERFORAQUASSIN A/CN |
| E10 | 1 | PERFORAQUASSIN B/CN |
| E11 | 1 | PERFORAQUASSIN C/CN |
| E12 | 1 | PERFORATIC ACID/CN |

=> e sulfonylpiperazine/cn

| | | |
|-----|---|---|
| E1 | 1 | SULFONYLDIVALERIC ACID/CN |
| E2 | 1 | SULFONYLLIGNIN/CN |
| E3 | 0 | --> SULFONYLPiperazine/CN |
| E4 | 1 | SULFONYLUREA RECEPTOR (CRICETUS CRICETUS HIT-T15 CELL GENE S |
| | | UR PRECURSOR) /CN |
| E5 | 1 | SULFONYLUREA RECEPTOR (DROSOPHILA MELANOGASTER) /CN |
| E6 | 1 | SULFONYLUREA RECEPTOR (HAMSTER 1498-AMINO ACID ISOFORM) /CN |
| E7 | 1 | SULFONYLUREA RECEPTOR (HAMSTER) /CN |
| E8 | 1 | SULFONYLUREA RECEPTOR (HUMAN GENE SUR C-TERMINAL FRAGMENT) /C |
| | | N |
| E9 | 2 | SULFONYLUREA RECEPTOR (HUMAN GENE SUR1) /CN |
| E10 | 1 | SULFONYLUREA RECEPTOR (HUMAN) /CN |
| E11 | 1 | SULFONYLUREA RECEPTOR (RAT) /CN |
| E12 | 1 | SULFONYLUREA RECEPTOR (RATTUS NORVEGICUS RINM5F CELL GENE SU |
| | | R PRECURSOR) /CN |

=> fil caplus uspatfull biosis embase medline

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 7.10 | 7.31 |

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=> d his

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E

[(1-PERFLUOROCTYLSULFONYLPIPERAZINE-4-CARBONYL) -METHYL] -MANNO
E MANNOPYRANOSE/CN
L1 1 S E3
E PERFLUOROROOCTYLSULFONYLPIPERAZINE/CN
E PERFLUOROROOCTYL/CN
E SULFONYLPIPERAZINE/CN

FILE 'CAPLUS, USPATFULL, BIOSIS, EMBASE, MEDLINE' ENTERED AT 12:29:02 ON
16 JUL 2002

=> s l1

L2 42 L1

=> s perfluoroalkyl

L3 18474 PERFLUOROALKYL

=> s 12(1)13

L4 0 L2(L) L3

=> s 12 and 13

L5 0 L2 AND L3

=> s perfluoro?

L6 77307 PERFLUORO?

=> s 16(1)12

L7 0 L6(L) L2

=> s mannose

L8 90223 MANNOSE

=> s 18 and 16

L9 331 L8 AND L6

=> s 18(1)16

L10 294 L8(L) L6

=> s paramagnetic or diamagnetic or diagnostic or pharmaceutical or contrast
agent or drug

4 FILES SEARCHED...

L11 8803713 PARAMAGNETIC OR DIAMAGNETIC OR DIAGNOSTIC OR PHARMACEUTICAL OR
CONTRAST AGENT OR DRUG

=> s l10 and l11

L12 184 L10 AND L11

=> s 18(p)16

L13 22 L8(P) L6

=> dup rem 113
PROCESSING COMPLETED FOR L13
L14 19 DUP REM L13 (3 DUPLICATES REMOVED)

=> d ibib abs

L14 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:142563 CAPLUS
DOCUMENT NUMBER: 136:209640
TITLE: Use of metal complexes containing perfluoroalkyl as contrast agents in MR-imaging for the representation of plaques, tumors and necroses
INVENTOR(S): Platzek, Johannes; Mareski, Peter; Niedballa, Ulrich; Raduechel, Bernd; Weinmann, Hanns-Joachim;
Messelwitz,
Bernd
PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 387 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|--------------------|------------|
| WO 2002013874 | A2 | 20020221 | WO 2001-EP8498 | 20010723 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| DE 10040380 | A1 | 20020228 | DE 2000-10040380 | 20000811 |
| AU 2001077549 | A5 | 20020225 | AU 2001-77549 | 20010723 |
| PRIORITY APPLN. INFO.: | | | DE 2000-10040380 A | 20000811 |
| | | | WO 2001-EP8498 | W 20010723 |

OTHER SOURCE(S): MARPAT 136:209640
AB The invention relates to the use of metal complexes contg. perfluoroalkyl, comprising a crit. micelle formation concn. < 10⁻³ mol/L, a hydrodynamic micelle diam. of (2 Rh) > 1 nm and a proton relaxivity in plasma (R₁) > 10 L/mmol, as contrast agents in MR imaging for the representation of plaque, lymph node, infarcted and necrotic tissue and for independent representation of necrotic tissue and tumoral tissue. For example, the Gd complex of 1,4,7-tris(carboxylatomethyl)-10-[(3-aza-4-oxo-5-methylpentanoyl-5-yl-N-(2-methoxyethyl)-N-(1H,1H,2H,2H,4H,4H,5H,5H-3-oxa)perfluorotridecyl)amide]-1,4,7,10-tetraazacyclododecane was prep'd. in a multistep process from 1H,1H,2H,4H,4H,5H,5H-3-oxaperfluorotridecanoic acid and 2-methoxyethylamine, followed by redn. to the resp. amine and reaction with the Gd complex of 10-[1-(carboxymethylcarbamoyl)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetic acid.

=> d 2 ibib abs

L14 ANSWER 2 OF 19 USPATFULL
ACCESSION NUMBER: 2001:173550 USPATFULL
TITLE: Foaming aqueous medium stable in the presence of grease, stabilization of a foaming aqueous medium in the presence of grease
INVENTOR(S): Bergeron, Vance, Lyons, France
Guerin, Gilles, Eaubonne, France
PATENT ASSIGNEE(S): Rhodia Chimie, Courbevoie Cedex, France (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------------------|
| PATENT INFORMATION: | US 6300296 | B1 | 20011009 |
| | WO 9833877 | | 19980806 |
| APPLICATION INFO.: | US 1999-355485 | | 19991005 (9) |
| | WO 1998-FR173 | | 19980130 |
| | | | 19991005 PCT 371 date |
| | | | 19991005 PCT 102(e) date |

| | NUMBER | DATE |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | FR 1997-1049 | 19970131 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Lovering, Richard D. | |
| LEGAL REPRESENTATIVE: | Burns, Doane, Swecker & Mathis, L.L.P. | |
| NUMBER OF CLAIMS: | 2 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 664 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns a foaming aqueous medium (FAM) capable of forming

a stable foam in the presence of grease (G). The foaming aqueous medium (FAM) of the present invention comprises water, at least one base surface-active agent (BSA) which comprises at least one amphiphilic additive (ADD), which is a fluorinated compound, compatible with said base surface-active agent (BSA). The present invention further concerns a liquid detergent composition for washing dishes by hand or textiles by

hand comprising an effective amount of the foaming aqueous medium (FAM) of the present invention. The present invention also concerns a liquid composition for body hygiene, oral hygiene or body treatment comprising an effective amount of the foaming aqueous medium (FAM) of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 2 kwic

L14 ANSWER 2 OF 19 USPATFULL
SUMM . . . one or more saccharide unit(s) comprising from 5 to 6 carbon atoms (units derived from sugars, such as fructose, glucose, mannose, galactose, talose, gulose, allose, altose, idose, arabinose, xylose, lyxose and/or ribose) and the hydrophobic part of which comprises a unit. . . R.sub.F (CH.sub.2).sub.n --, where n can range from 2 to 20, preferably from 2 to 10, and R.sub.F represents a

perfluoroalkyl unit of formula C._mF._{2m+1} with m being able to range from 1 to 10, preferably from 4 to 8, which are chosen from those exhibiting the characteristics defined above; mention may be made of monoesters of **perfluoroalkylated** fatty acids and of sugars, such as .alpha.,.alpha.-trehalose and sucrose, it being possible

for the monoester functional group to be represented by the formula R._nF (CH₂)_nC(O), where n can range from 2 to 10 and R._nF represents a **perfluoroalkyl** unit of formula C._mF._{2m+1} with m being able to range from 4 to 8, which are described in JAOCs, . . .

=> d 3 ibib abs

L14 ANSWER 3 OF 19 USPATFULL

ACCESSION NUMBER: 1999:37221 USPATFULL
TITLE: AZO group-containing high molecular weight compound
for

INVENTOR(S): block copolymerization
Kitano, Hiromi, Toyama-ken, Japan
Shiraki, Kazuo, Kawagoe, Japan
Yamashita, Yoshihisa, Osaka, Japan
PATENT ASSIGNEE(S): Wako Pure Chemical Industries, Ltd., Osaka, Japan
(non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 5886109 | | 19990323 |
| APPLICATION INFO.: | US 1997-847509 | | 19970424 (8) |

| | NUMBER | DATE |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | JP 1996-132622 | 19960430 |
| | JP 1996-135733 | 19960502 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Mullis, Jeffrey | |
| LEGAL REPRESENTATIVE: | Oliff & Berridge, PLC | |
| NUMBER OF CLAIMS: | 15 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 2 Drawing Figure(s); 1 Drawing Page(s) | |
| LINE COUNT: | 1311 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An azo group-containing high molecular weight compound including --COHN--, an ester linkage, or an amido linkage and a monomer units of 10 to 1000 derived from .alpha.,.beta.-ethylenically unsaturated monomer

is effective for producing a block copolymer having two or more polymer segments different in structure by one-step reaction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 3 kwic

L14 ANSWER 3 OF 19 USPATFULL

DETD . . . chloromethyl group, a bromomethyl group, a trifluoromethyl group, a 2-chloroethyl group, a 3-chloropropyl group, a 3-bromopropyl group, a 3,3,3-trifluoropropyl group, 2-**perfluorooctylethyl**

group, a **p rfluoroctyl** group, a 1-chlorodecyl group, a 1-chlorooctadecyl group, etc. As the cyano-containing alkyl group represented by R.⁵, there can be exemplified. . . examples of the sugar are monosaccharides such as glucose, galactose, fructose, glucosamine, galactosamine, gluconic acid, 1-thio-D-glucose, 5-thio-D-glucose, xylose, ribose, **mannose**, etc.; disaccharides such as maltose, lactose, cellobiose, sucrose, trehalose, etc.; and trisaccharides such as maltotriose, N,N',N"-triacetylchitotriose, etc. As the aminoalkyl. . .

DETD . . . chloromethyl group, a bromomethyl group, a trifluoromethyl group, a 2-chloroethyl group, a 3-chloropropyl group, a 3-bromopropyl group, a 3,3,3-trifluoropropyl group, **2-perfluoroctylethyl** group, a **perfluoroctyl** group, a 1-chlorodecyl group, a 1-chlorooctadecyl group, etc. As the cyano-containing alkyl group represented by R.⁸, there can be exemplified. . . Specific examples of the sugar are monosaccharides such as glucose, galactose, fructose, glucosamine, galactosamine, gluconic acid, 1-thio-D-glucose, 5-thio-D-glucose, xylose, ribose, **mannose**, etc.; disaccharides such as maltose, lactose, cellobiose, sucrose, trehalose, etc.; and trisaccharides such as maltotriose, N,N',N"-triacetylchitotriose, etc. As the aminoalkyl. . .

=> d 4 ibib abs

L14 ANSWER 4 OF 19 USPATFULL
ACCESSION NUMBER: 1998:153841 USPATFULL
TITLE: Perfluoroalkylated amphiphilic phosphorus compounds: preparation and biomedical applications
INVENTOR(S): Riess, Jean G., Nice, France
Greiner, Jacques, Nice, France
Milius, Alain, Nice, France
Vierling, Pierre, Nice, France
Guillod, Frederic, Nice, France
Gaentzler, Sylvie, Nice, France
PATENT ASSIGNEE(S): Alliance Pharmaceutical Corp., San Diego, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5846516 | | 19981208 |
| APPLICATION INFO.: | US 1992-893227 | | 19920603 (7) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Lovering, Richard D. | | |
| LEGAL REPRESENTATIVE: | Knobbe, Martens, Olson & Bear | | |
| NUMBER OF CLAIMS: | 32 | | |
| EXEMPLARY CLAIM: | 1,16,18 | | |
| NUMBER OF DRAWINGS: | 9 Drawing Figure(s); 8 Drawing Page(s) | | |
| LINE COUNT: | 1428 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Perfluoroalkylated amphiphilic phosphorus compounds, corresponding to the formulae: ##STR1## wherein V is O or S;

R.¹, R.² and R.³ are H or substituted or unsubstituted perfluoroalkylated or hydrocarbon radicals;

provided that

R.sup.1, R.sup.2 or R.sup.3 is a perfluoroalkylated radical; and Y and Z are radicals which can bear a part derived from a sugar, a polyol, or a hydrophilic polymer such as polyethyleneglycol, a perfluoroalkylated part or a part derived from a pharmaceutically active molecule, and method for their preparation and use. These compounds can be included in preparations, emulsions, dispersions, gels, microemulsions, notably for biomedical uses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 5 ibib abs

L14 ANSWER 5 OF 19 USPATFULL
ACCESSION NUMBER: 1998:88947 USPATFULL
TITLE: 1-C-perflouroalkyl glycosides, preparation process and uses thereof
INVENTOR(S): Lavaire, Sandrine, Reims, France
Plantier-Ryon, Richard, Reims, France
Portella, Charles, Cormontreuil, France
PATENT ASSIGNEE(S): CECA S.A., France (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 5786469 | | 19980728 |
| APPLICATION INFO.: | US 1997-879364 | | 19970620 (8) |

| | NUMBER | DATE |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | FR 1996-7692 | 19960620 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Kight, John | |
| ASSISTANT EXAMINER: | Lee, Howard C. | |
| LEGAL REPRESENTATIVE: | Millen, White, Zelano & Branigan, P.C. | |
| NUMBER OF CLAIMS: | 15 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 626 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to 1-C-perfluoroalkyl glucosides consisting essentially of a monosaccharide having an anomeric carbon directly linked to a perfluoroalkyl radical and a hydroxyl group. These glycosides are prepared by a process comprising: (a) reacting an aldonolactone with a hydroxyl protecting group; (b) reacting the product of step (a) with a compound of formula R._{sub.F} -M in which R._{sub.F} represents a linear or branched perfluoroalkyl radical containing from 2 to 12 carbon atoms, and M represents Li or MgX, X being a halogen; and (c) liberating the hydroxyl group. The 1-C-perfluoroalkyl glycosides may be used as surfactants and as flame retardants.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 6 ibib abs

L14 ANSWER 6 OF 19 USPATFULL
 ACCESSION NUMBER: 97:96663 USPATFULL
 TITLE: Perfluorinated amphiphilic phosphorous compounds:
 liposomal compositions
 INVENTOR(S): Riess, Jean G., Nice, France
 Greiner, Jacques, Nice, France
 Milius, Alain, Nice, France
 Vierling, Pierre, Nice, France
 Guillod, Frederic, Nice, France
 Gaentzler, Sylvie, Nice, France
 PATENT ASSIGNEE(S): Alliance Pharmaceutical Corp., San Diego, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5679459 | | 19971021 |
| APPLICATION INFO.: | US 1995-467467 | | 19950606 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1992-893227, filed on 3 Jun 1992 | | |

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Lovering, Richard D.
 LEGAL REPRESENTATIVE: Knobbe, Martens Olson & Bear
 NUMBER OF CLAIMS: 4
 EXEMPLARY CLAIM: 1, 2
 NUMBER OF DRAWINGS: 9 Drawing Figure(s); 8 Drawing Page(s)
 LINE COUNT: 1308
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Perfluoroalkylated amphiphilic phosphorus compounds, corresponding to the formulae: ##STR1## wherein V is O or S;

R.sup.1, R.sup.2 and R.sup.3 are H or substituted or unsubstituted perfluoroalkylated or hydrocarbon radicals;

provided that

R.sup.1, R.sup.2 or R.sup.3 is a perfluoroalkylated radical; and Y and

Z are radicals which can bear a part derived from a sugar, a polyol, or a hydrophilic polymer such as polyethyleneglycol, a perfluoroalkylated part or a part derived from a pharmaceutically active molecule, and method for their preparation and use. These compounds can be included in preparations, emulsions, dispersions, gels, microemulsions, notably for biomedical uses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 7 ibib abs

L14 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1997:695896 CAPLUS
 DOCUMENT NUMBER: 127:307551
 TITLE: Sugar carbamates with mixed fluorocarbon/hydrocarbon double-chains as vesicle-forming non-ionic amphiphiles
 AUTHOR(S): Lucas, P.; Trabelsi, H.; Szonyi, S.; Cambon, A.
 CORPORATE SOURCE: Laboratoire de Chimie Organique du Fluor, Universite de Nice-Sophia Antipolis, NICE, F - 06108, Fr.

SOURCE: Conference on Colloid Chemistry: In Memoriam Aladar Buzagh, Proceedings, 7th, Eger, Hung., Sept. 23-26, 1996 (1997), Meeting Date 1996, 316-319. Editor(s): Horvoelgyi, Z.; Nemeth, Zs.; Paszli, I. Hungarian Chemical Society: Budapest, Hung.
CODEN: 65EWAR

DOCUMENT TYPE: Conference; General Review
LANGUAGE: English

AB A review with 25 refs. on the prepn. of new F-alkylated glycolipids with mixed fluorocarbon/hydrocarbon double-chains as hydrophobic part and with a sugar moiety (glucose, galactose, **mannose**) as hydrophilic part. The prepn. strategy which does not require preliminary protection of the sugar consists in the condensation of an isocyanate deriv. bearing the **perfluoroalkyl**/alkyl tails with a sugar such as D-glucose or Me .alpha.-D-glucoside. We obsd. the selective formation of carbamates on C-6 of glycopyranosic ring with excellent yields.

=> d 7 kwic

L14 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2002 ACS
AB . . . the prepn. of new F-alkylated glycolipids with mixed fluorocarbon/hydrocarbon double-chains as hydrophobic part and with a sugar moiety (glucose, galactose, **mannose**) as hydrophilic part. The prepn. strategy which does not require preliminary protection of the sugar consists in the condensation of an isocyanate deriv. bearing the **perfluoroalkyl**/alkyl tails with a sugar such as D-glucose or Me .alpha.-D-glucoside. We obsd. the selective formation of carbamates on C-6 of . . .

=> d 8 ibib abs

L14 ANSWER 8 OF 19 USPATFULL
ACCESSION NUMBER: 96:97100 USPATFULL
TITLE: Physiologically acceptable emulsions containing perfluorocarbon ether hydrides and methods of use
INVENTOR(S): Moore, George G. I., Afton, MN, United States
Flynn, Richard M., Mahtomedi, MN, United States
Guerra, Miguel A., Woodbury, MN, United States
PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Company, St. Paul, MN, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5567765 | | 19961022 |
| APPLICATION INFO.: | US 1996-606516 | | 19960223 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1995-437299, filed on 17 May 1995, now patented, Pat. No. US 5502094 which is a continuation-in-part of Ser. No. US 1994-246962, filed on 20 May 1994, now patented, Pat. No. US 5476974 | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Acquah, Samuel A. | | |
| LEGAL REPRESENTATIVE: | Wood, Herron & Evans, P.L.L. | | |
| NUMBER OF CLAIMS: | 9 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 1296 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to physiologically acceptable emulsions of perfluorocarbon ether hydrides having 8 to 12 carbon atoms. These novel emulsions have various medical applications. They are especially useful medically as contrast media for various biological imaging modalities such as nuclear magnetic resonance, ¹⁹F-magnetic resonance imaging, ultrasound, x-ray, and computed tomography, as oxygen transport agents or "artificial bloods" in the treatment of heart attack, stroke, and other vascular obstructions, as adjuvants to coronary angioplasty and in cancer radiation treatment and chemotherapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 9 ibib abs

L14 ANSWER 9 OF 19 USPATFULL

ACCESSION NUMBER: 96:24981 USPATFULL
TITLE: Physiologically acceptable emulsions containing perfluorocarbon ether hydrides and methods for use
INVENTOR(S): Moore, George G. I., Afton, MN, United States
Flynn, Richard M., Mahtomedi, MN, United States
Guerra, Miguel A., Woodbury, MN, United States
PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Company, Saint Paul, MN, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 5502094 | | 19960326 |
| APPLICATION INFO.: | US 1995-437299 | | 19950517 (8) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1994-246962, filed on 20 May 1994 | | |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Acquah, Samuel A.
LEGAL REPRESENTATIVE: Wood, Herron & Evans
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
LINE COUNT: 1241

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to physiologically acceptable emulsions of perfluorocarbon ether hydrides having 8 to 12 carbon atoms. These novel emulsions have various medical applications. They are especially useful medically as contrast media for various biological imaging modalities such as nuclear magnetic resonance, ¹⁹F-magnetic resonance imaging, ultrasound, x-ray, and computed tomography, as oxygen transport agents or "artificial bloods" in the treatment of heart attack, stroke, and other vascular obstructions, as adjuvants to coronary angioplasty and in cancer radiation treatment and chemotherapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 10 ibib abs

L14 ANSWER 10 OF 19 USPATFULL

ACCESSION NUMBER: 96:12805 USPATFULL
TITLE: Immobilization of biomolecules on a fluorocarbon

INVENTOR(S) : surface with a poly(fluoroalkyl) sugar reagent
Arentzen, Rene, Wilmington, DE, United States
Jadhav, Prabhakar K., Wilmington, DE, United States
Kobos, Robert K., Wilmington, DE, United States
Smart, Bruce E., Wilmington, DE, United States
E. I. Du Pont de Nemours and Company, Wilmington, DE,
United States (U.S. corporation)

PATENT ASSIGNEE(S) :

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 5491083 | | 19960213 |
| APPLICATION INFO.: | US 1994-318398 | | 19941005 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1993-63676, filed on 20 May 1993, now patented, Pat. No. US 5384254 which is a division of Ser. No. US 1990-586173, filed on 21 Sep 1990, now patented, Pat. No. US 5243037 | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Naff, David M. | | |
| NUMBER OF CLAIMS: | 16 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 1408 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Poly(fluoroalkyl) sugar reagents are prepared containing a sugar such as

a monosaccharide or a disaccharide to which are bonded a plurality of fluoroalkyl anchor groups capable of attaching to a fluorocarbon surface, and either a reactive group capable of covalent coupling to a biomolecule such as an enzyme or a charged group to form an ion-exchanger or a non-ionic group to give a neutral fluorosurfactant.

A

spacer may be between the reactive group and the sugar. The poly(fluoroalkyl) sugar reagents are strongly adsorbed onto fluorocarbon

surfaces to provide supports for such applications as separation and immobilization of biomolecules such as enzymes, carrying out heterogeneous diagnostic assays, and preparation of biosensors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 11 ibib abs

L14 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
ACCESSION NUMBER: 1996:445244 CAPLUS
DOCUMENT NUMBER: 125:161606
TITLE: Vesicles made of glycophospholipids with homogeneous
(two fluorocarbon or two hydrocarbon) or
heterogeneous
(one fluorocarbon and one hydrocarbon) hydrophobic
double chains
AUTHOR(S): Guillod, Frederic; Greiner, Jacques; Riess, Jean G.
CORPORATE SOURCE: Unite de Chimie Moleculaire, Universite de
Nice-Sophia
SOURCE: Antipolis, CNRS URA 426, Parc Valrose, Nice, 06108/2,
Fr.
Biochim. Biophys. Acta (1996), 1282(2), 283-292
CODEN: BBACAQ; ISSN: 0006-3002
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The vesicle-forming ability of new anionic double chain glycophospholipids, with either two hydrocarbon or two **perfluorocarbon** chains, or a mixed double chain (one fluorinated, one hydrogenated), was investigated. When dispersed in water, some readily gave heat-sterilizable vesicles, 30-70 nm in diam. The galactose and mannose-based fluorinated vesicles were also highly stable on aging. The 6-substituted glucose derivs. formed tubules that reversibly interconverted into vesicles, depending on temp. The leakage rate in buffer of carboxyfluorescein or calcein from vesicles made from some of the glycophospholipids depended on the sugar ($t_{1/2}$ galactose>mannose>glucose). It decreased significantly with increasing fluorination and length of the hydrophobic tails. The mixed **perfluorocarbon**/hydrocarbon-tailed amphiphiles were found to be miscible with both the two fluorocarbon chains and the two hydrocarbon chains derivs. Such admixing tended, however, to increase the small unilamellar vesicles' permeability. In buffered serum, all the vesicles investigated were highly permeable, but incorporation of cholesterol or DSPC in vesicles made of 1e significantly reduced their permeability in serum. The new vesicle and membrane components have i.v. max. tolerated doses as high as 500 mg/kg body wt. in mice; hemolytic activity sharply decreases with increasing degree of fluorination.

=> d 12 ibib abs

L14 ANSWER 12 OF 19 USPATFULL

ACCESSION NUMBER: 95:7819 USPATFULL
TITLE: Immobilization of biomolecules on a fluorocarbon surface modified with a poly(fluoroalkyl) sugar
reagent
INVENTOR(S): Arentzen, Rene, Wilmington, DE, United States
Jadhav, Prabhakar K., Wilmington, DE, United States
Kobos, Robert K., Wilmington, DE, United States
Smart, Bruce E., Wilmington, DE, United States
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours and Company, Wilmington, DE, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5384254 | | 19950124 |
| APPLICATION INFO.: | US 1993-63676 | | 19930520 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1990-586173, filed on 21 Sep 1990, now patented, Pat. No. US 5243037 | | |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Naff, David M.
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 17
LINE COUNT: 1440
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Poly(fluoroalkyl) sugar reagents are prepared containing a sugar such as a monosaccharide or a disaccharide to which are bonded a plurality of fluoroalkyl anchor groups capable of attaching to a fluorocarbon surface, and either a reactive group capable of covalent coupling to a biomolecule such as an enzyme or a charged group to form an ion-exchanger or a non-ionic group to give a neutral fluorosurfactant.

A spacer may be between the reactive group and the sugar. The poly(fluoroalkyl) sugar reagents are strongly adsorbed onto fluorocarbon

surfaces to provide supports for such applications as separation and immobilization of biomolecules such as enzymes, carrying out heterogeneous diagnostic assays, and preparation of biosensors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 13 ibib abs

L14 ANSWER 13 OF 19 USPATFULL
ACCESSION NUMBER: 94:75454 USPATFULL
TITLE: Process for enzyme immobilization on a fluorocarbon surface
INVENTOR(S): Arenzen, Rene, Wilmington, DE, United States
Boivin, Patrick, Nancy, France
Kobos, Robert K., Wilmington, DE, United States
Scouten, William H., Hewitt, TX, United States
Smart, Bruce E., Wilmington, DE, United States
PATENT ASSIGNEE(S): E. I. du Pont de Nemours and Company, Wilmington, DE, United States (U.S. corporation)
Baylor University, Waco, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5342772 | | 19940830 |
| APPLICATION INFO.: | US 1993-15939 | | 19930210 (8) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1990-586183, filed on 21 Sep 1990, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Naff, David M. | | |
| NUMBER OF CLAIMS: | 4 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 1275 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The fluorocarbon surface of a solid or liquid support is activated with a highly fluorinated isocyanate-modified ligand or with a reactive poly(fluoroalkyl) sugar reagent containing a polyhydroxy sugar to which are attached a plurality of fluoroalkyl anchor groups, a reactive group and optionally a spacer. The activated support has application in separation of biomolecules, immobilization of biomolecules, heterogeneous diagnostic assays, and biosensors. An enzyme or other biomolecule is immobilized by contacting the activated support surface with the enzyme in the presence of a surfactant. The surfactant is preferably a neutral surfactant such as a fluoroalkyl-polyoxyethylene.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 14 ibib abs

L14 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:363397 CAPLUS
DOCUMENT NUMBER: 122:240217
TITLE: Linkage position determination of lithium-cationized disaccharides by surface-induced dissociation tandem mass spectrometry
AUTHOR(S): Dongre, Ashok R.; Wysocki, Vicki H.
CORPORATE SOURCE: Dep. Chem., Virginia Commonw. Univ., Richmond, VA,

SOURCE: 23284-2006, USA
DOCUMENT TYPE: Org. Mass Spectrom. (1994), 29(11), 700-2
LANGUAGE: English
AB Surface-induced dissoci. spectra of four isomers of mannosyl-.alpha.(1.fwdarw.Y)-mannose (Y = 2-4, 6) on a 2-(perfluoroctyl)ethanethiol monolayer surface on gold are reported.

=> d 15 ibib abs

L14 ANSWER 15 OF 19 USPATFULL
ACCESSION NUMBER: 93:74419 USPATFULL
TITLE: Poly(fluoroalkyl) sugar reagents for surface modification of supports
INVENTOR(S): Arentzen, Rene, Wilmington, DE, United States
Jadhav, Prabhakar K., Wilmington, DE, United States
Kobos, Robert K., Wilmington, DE, United States
Smart, Bruce E., Wilmington, DE, United States
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours and Company, Wilmington, DE, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|--|--|------|--------------|
| PATENT INFORMATION: | US 5243037 | | 19930907 |
| APPLICATION INFO.: | US 1990-586173 | | 19900921 (7) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Naff, David M. | | |
| LEGAL REPRESENTATIVE: | Sieggel, Barbara C. | | |
| NUMBER OF CLAIMS: | 4 | | |
| EXEMPLARY CLAIM: | 1,2 | | |
| LINE COUNT: | 1308 | | |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. | | | |
| AB | Poly(fluoroalkyl) sugar reagents are prepared containing a sugar such as a monosaccharide or a disaccharide to which are bonded multiple fluoroalkyl anchor groups capable of attaching to a fluorocarbon surface, and either a reactive group capable of covalent coupling to a biomolecule or a charged group to form an ion-exchanger or a non-ionic group to give a neutral fluorosurfactant. A spacer may be between the reactive group and the sugar. The poly(fluoroalkyl) sugar reagents are strongly adsorbed onto fluorocarbon surfaces to provide supports for such applications as separation and immobilization of biomolecules such as enzymes, carrying out heterogeneous diagnostic assays, and preparation of biosensors. | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 16 ibib abs

L14 ANSWER 16 OF 19 USPATFULL
ACCESSION NUMBER: 90:76889 USPATFULL
TITLE: Novel perfluoropolyethers
INVENTOR(S): Nappa, Mario J., Newark, DE, United States
Sievert, Allen C., Elkton, DE, United States
Tong, Walter R., New Castle, DE, United States
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours and Company, Wilmington, DE,

United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 4960951 | | 19901002 |
| APPLICATION INFO.: | US 1990-480351 | | 19900214 (7) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1989-303150, filed on 30 Jan 1989, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Mars, Howard T. | | |
| LEGAL REPRESENTATIVE: | Krukiel, Charles E. | | |
| NUMBER OF CLAIMS: | 6 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 389 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel perfluoropolyethers, such as perfluorodipentaerythritol hexaethyl ether, and their intermediates exhibit excellent chemical and thermal stability and are useful as vapor phase soldering fluids and convection cooling liquids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 17 ibib abs

L14 ANSWER 17 OF 19 USPATFULL
 ACCESSION NUMBER: 90:73469 USPATFULL
 TITLE: Perfluoroalkylthioglycosides
 INVENTOR(S): Falk, Robert A., New City, NY, United States
 Clark, Kirtland P., Bethel, CT, United States
 Coughlin, Gregory R., Katonah, NY, United States
 PATENT ASSIGNEE(S): Ciba-Geigy Corporation, Ardsley, NY, United States
 (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 4957904 | | 19900918 |
| APPLICATION INFO.: | US 1989-353586 | | 19890518 (7) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1988-286553, filed on 19 Dec 1988, now abandoned | | |

| | NUMBER | DATE |
|-----------------------|---------------------------------------|----------|
| PRIORITY INFORMATION: | CH 1988-1963 | 19880524 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Brown, Johnnie R. | |
| ASSISTANT EXAMINER: | White, Everett | |
| LEGAL REPRESENTATIVE: | Hall, Luther A. R., Villamizar, JoAnn | |
| NUMBER OF CLAIMS: | 19 | |
| EXEMPLARY CLAIM: | 1,16 | |
| LINE COUNT: | 398 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel nonionic perfluoroalkylthioglycosides of the formula, R._{sub.f}-E-S-saccharide are described, wherein R._{sub.f} is a straight or branched

chain perfluoroalkyl of 1 to 18 carbon atoms or said perfluoroalkyl substituted by perfluoroalkoxy of 2 to 6 carbon atoms, E is a connecting

group, and the saccharide is a mono-, di-, or higher oligosaccharide, comprising 1 to 30 units of 5, 6 or 7 carbon-membered sugars.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 18 ibib abs

L14 ANSWER 18 OF 19 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 1987:382575 BIOSIS

DOCUMENT NUMBER: BA84:69072

TITLE: METABOLISM OF AN ISOLATED BRAIN PERFUSED WITH PERFLUORO BLOOD SUBSTITUTE.

AUTHOR(S): MUKHERJI B; SLOVITER H A

CORPORATE SOURCE: DEP. BIOCHEM. BIOPHYSICS, SCH. MED., UNIV. PA., PHILADELPHIA, PA. 19104.

SOURCE: J BIOSCI (BANGALORE), (1987) 11 (1-4), 23-34.

CODEN: JOBSDN. ISSN: 0250-4774.

FILE SEGMENT: BA; OLD

LANGUAGE: English

AB An unanesthetized, isolated, perfused rat brain, consisting of the skull and its contents with nearly all other tissues removed, has metabolic and electric activity similar to that of the brain of the intact rat with its blood-brain barrier intact. Its use yielded results that are difficult or impossible to obtain from in vitro preparations or in vivo. With the perfused brain it was shown that, **mannose** can completely replace glucose as metabolic substrate, that insulin has no direct effect on the brain, in the absence of added substrate glutamate is metabolized to aspartate, the brain does not metabolize ethanol, and morphine probably inhibits mitochondrial oxidative activity. Since the use of a **perfluoro** blood substitute to perfuse the brain avoids the optical interference caused by haemoglobin, it was possible to measure changes in the oxidation-reduction state of NADH by surface fluorometry of the cerebral cortex.

=> d 19 ibib abs

L14 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1978:597844 CAPLUS

DOCUMENT NUMBER: 89:197844

TITLE: Studies of the stability of reducing sugars towards trifluoroacetolysis: a method for specific elimination of 2-acetamido-2-deoxyhexose residues at reducing ends of oligosaccharides

AUTHOR(S): Nilsson, Bo; Svensson, Sigfrid

CORPORATE SOURCE: Dep. Clin. Chem., Univ. Hosp., Lund, Swed.

SOURCE: Carbohydr. Res. (1978), 65(1), 169-71

CODEN: CRBRAT; ISSN: 0008-6215

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Trifluoroacetolysis of pentoses, hexoses, 6-deoxyhexoses, 2-deoxy-D-erythro-pentose, 2-deoxy-D-lyxo-hexose, 2-amino-2-deoxy-D-galactose, 2-acetamido-2-deoxy-D-glucose, and -D-**mannose** with 1:1, 1:2, and 50:1 (CF₃CO)₂O-CF₃CO₂H mixts. at 100.degree. for 48 h showed

that the presence of a 2-O-CF₃CO group is essential in the **perfluoroacetates** of the reducing sugars for stabilization towards acid-catalyzed degrdn. E.g., hexoses with 1:1 and 50:1 reagents gave the corresponding pertrifluoroacetates in quant. yield; 2-acetamido-2-deoxy

sugars were converted into their pertrifluoroacetates and then gradually transamidated to give the N-trifluoroacetates, which were stable in 50:1 reagent but were severely degraded by 1:1 and 1:2 reagents.
Trifluoroacetolysis of .alpha.-D-Manp-(1.fwdarw.3)-.beta.-D-Manp-(1.fwdarw.4)-D-GlcNAc with 1:1 and 1:2 reagents gave pertrifluoroacetylated .alpha.-D-Manp-(1.fwdarw.3)-D-man in nearly quant. yield.

| => log y | | SINCE FILE | TOTAL |
|--|--|----------------|------------------|
| COST IN U.S. DOLLARS | | ENTRY | SESSION |
| FULL ESTIMATED COST | | 64.38 | 71.69 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | | SINCE FILE | TOTAL |
| CA SUBSCRIBER PRICE | | ENTRY
-3.72 | SESSION
-3.72 |

STN INTERNATIONAL LOGOFF AT 12:37:20 ON 16 JUL 2002

FILE 'HOME' ENTERED AT 13:50:25 ON 16 JUL 2002

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=> s paramagnetic
L1 77270 PARAMAGNETIC

=> s diamagnetic
L2 19814 DIAMAGNETIC

=> s perfluoro
=> s perfluoro?
L3 74627 PERFLUORO?

=> s 11(1)12(1)13
L4 19 L1(L) L2(L) L3

```
=> dup rem l4
PROCESSING COMPLETED FOR L4
L5          19 DUP REM L4 (0 DUPLICATES REMOVED)
```

=> d ibib abs

L5 ANSWER 1 OF 19 USPATFULL
ACCESSION NUMBER: 2002:119300 USPATFULL
TITLE: DIAGNOSTIC IMAGING OF LYMPH STRUCTURES
INVENTOR(S): MATTREY, ROBERT F., SAN DIEGO, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 2002061280 | A1 | 20020523 |
| APPLICATION INFO.: | US 1999-245828 | A1 | 19990205 (9) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | GRAY CARY WARE & FREIDENRICH, 4365 EXECUTIVE DRIVE,
SUITE 1600, SAN DIEGO, CA, 921212189 | | |
| NUMBER OF CLAIMS: | 20 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 1390 | | |
| AB | In accordance with the present invention, there are provided methods
for | | |

identifying the sentinel lymph node in a drainage field for a tissue or organ in a subject. In select embodiments, the invention allows for the identification of the first or sentinel lymph node that drains the tissue or organ, particularly those tissues associated with neoplastic or infectious diseases and disorders, and within the pertinent lymph drainage basin. Once the drainage basin from the tissue or organ, i.e., the sentinel lymph node, is identified, a pre-operative or intraoperative mapping of the affected lymphatic structure can be carried out with a contrast agent. Identification of the first or sentinel lymph node, on the most direct drainage pathway in the

drainage field, can be accomplished by a variety of imaging techniques, including

ultrasound, MRI, CT, nuclear and others. Moreover, once the lymphatic structure is identified as being associated with neoplastic or infectious diseases and disorders, the affected lymphatic structure can be removed surgically or by a suitable minimally invasive procedure to allow pathological analysis to be performed to determine whether certain

diseases or disorders exist, without resort to more radical lymphadenectomy. Further, the agent can be made to carry diagnostic or therapeutic probes to be activated and/or delivered to the injection site or any part of the lymphatic pathway downstream from the injection site.

=> d kwic

L5 ANSWER 1 OF 19 USPATFULL

SUMM . . . that are different from the corresponding properties of the tissue being imaged. Either an imageable nucleus (such as ^{.sup.19F}), radionuclides, diamagnetic, paramagnetic, ferromagnetic, superparamagnetic substances, and the like, can be used with appropriate MRI equipment.

SUMM . . . preferred contrast agent may comprise a microbubble preparation

wherein the microbubbles are associated with an MRI agent such as a paramagnetic material.

SUMM . . . stabilizing agents for microbubble preparations. The term "fluorocarbon" is used herein in its broadest sense and includes fully fluorinated compounds (perfluorocarbons) as well as partially fluorinated hydrocarbon materials (fluorochemicals or fluorinated compounds), including unsubstituted chains or those substituted with another halogen. . . .

SUMM . . . fluorotrimethylcyclobutanes, fluorobutanes, fluorocyclobutanse, fluoropropanes, fluoroethers, fluoropolyethers, fluorotriethylamines, and the like. Particularly preferred embodiments of the present invention employ microbubbles comprising perfluorohexanes, perfluoropentanes, perfluorobutanes, perfluoropropanes, sulfur hexafluoride, and the like. One particular preferable class of compatible compounds comprises flouroethers. Other useful gases or vapors comprise. . . .

SUMM . . . because contrast agents of a primary modifier gas such as air or nitrogen (including fluorocarbon gases) saturated with a selected perfluorocarbon osmotic agent can grow rather than shrink when exposed to air dissolved in a liquid due to the osmotic pressure exerted

by the perfluorocarbon gas or vapor. Preferably, the osmotic

agent is relatively impermeable to the contrast agent film and thus remains inside the contrast agent. Air or other gases inside the contrast agent are diluted by the **perfluorocarbon**, which acts to slow the air diffusion flux out of the contrast agent. This gas osmotic pressure is proportional to the concentration gradient of the **perfluorocarbon** vapor across the contrast agent film, the concentration of air surrounding the contrast agent, and the ratio of the contrast agent film permeability to air and to **perfluorocarbon**.

SUMM [0055] Further, as disclosed in U.S. Pat. No. 5,315,997, gases and **perfluorocarbon** vapors have magnetic susceptibilities substantially different from tissues and blood. Therefore, microbubble contrast agents comprising fluorinated compounds will cause changes . . . also be used for magnetic resonance visualization. Other exemplary MRI agents, which may be used with the present invention comprise **paramagnetic** and supraparamagnetic macromolecular compounds or particulates that may be associated with microbubbles (i.e. on the membrane) or mixed with a . . . be found in U.S. Pat. Nos. 4,675,173 and 4,849,210, each of which is incorporated herein by reference. With respect to **paramagnetic** compounds, gadolinium diethylenetriaminepentaacetic acid (Gd-DTPA), and transition metal ions of iron and manganese may be used in conjunction with the. . . .

=> d 2 ibib abs

L5 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:373378 CAPLUS
TITLE: DFT Calculation of NMR JFF Spin-Spin Coupling Constants in Fluorinated Pyridines
AUTHOR(S): Barone, Veronica; Peralta, Juan E.; Contreras, Ruben H.; Snyder, James P.
CORPORATE SOURCE: Departamento de Fisica FCEyN, Universidad de Buenos Aires, Buenos Aires, Argent.
SOURCE: Journal of Physical Chemistry A (2002), 106(23), 5607-5612
CODEN: JPCAFH; ISSN: 1089-5639
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB All four isotropic contributions to the NMR fluorine-fluorine coupling consts. (Fermi contact, FC, spin-dipolar, SD, **paramagnetic** spin-orbit, PSO, and **diamagnetic** spin-orbit, DSO) have been calcd. for 2,6-difluoropyridine, 2,4,6-trifluoropyridine, **perfluoropyridine**, and 2-Br-3,4,5,6,7,8-hexafluoroquinoline by means of d. functional theory in combination with the rather modest 6-311G** basis set. Exptl. values ranging from -20.3 to +45.8 Hz are semiquant. reproduced for three- to seven-bond couplings, suggesting that the different electronic effects responsible for the spin-spin interactions are adequately taken into account. In all cases, the relative importance of noncontact terms was examd. With few exceptions, the sum of the SD and PSO noncontact terms is larger than the FC contact contribution, even though in most cases the two noncontact values have opposite signs. The widespread assumption that the Fermi contact term dominates scalar spin-spin couplings in the case of light atoms would appear to be an oversimplification for JFF in polyfluorinated org. mols. In addn., the CPU performance of the Fermi contact contribution calcd. sep. by the coupled-perturbed and the finite-perturbation methods was investigated showing the latter to be slightly more efficient.

REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

=> d 3 ibib abs

L5 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:246519 CAPLUS
DOCUMENT NUMBER: 134:271318
TITLE: Contrast agent formulations containing
paramagnetic and diamagnetic
perfluoroalkyl compounds for magnetic
resonance tomography
INVENTOR(S): Platzek, Johannes; Niedballa, Ulrich; Raduchel,
Bernd;
Mareski, Peter; Misselwitz, Bernd; Frenzel, Thomas;
Weinmann, Hanns-Joachim
PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany
SOURCE: Eur. Pat. Appl., 73 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|--------------------|----------|
| EP 1088558 | A2 | 20010404 | EP 2000-250323 | 20000928 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| PRIORITY APPLN. INFO.: | | | DE 1999-19948651 A | 19990929 |
| | | | US 1999-158307P P | 19991008 |

AB The invention concerns galenic formulations to be used as contrast agents for lymph node magnetic resonance tomog. that contain paramagnetic and diamagnetic perfluoroalkyl compds. Paramagnetic perfluoroalkyl gadolinium complexes, diamagnetic perfluoroalkyl compds. and their formulations are described. Thus, a piperazinyltetraazacyclododecane contg. gadolinium complex was dissolved in 0.45% NaCl soln. (pH 7.4, 0.25 mg/L CaNa3DTPA) to yield 280 mmol/L; 3.17 g of synthesized 6-[1-O-.alpha.-D-mannopyranosyl]hexanoic acid N-(3-oxa-1H,1H,2H,4H,4H,5H-perfluorodecyl)amide and 0.9% NaCl soln. were added. The mixt. was treated at 60.degree.C in an ultrasonic bath. After cooling to room temp., pH was set to 7.4 with 2 N Sodium hydroxide. The soln. was filtered through 0.2 .mu.m filter; the filtrate was used as contrast agent.

=> d 4 ibib abs

L5 ANSWER 4 OF 19 USPATFULL
ACCESSION NUMBER: 2001:199793 USPATFULL
TITLE: Gas barrier film
INVENTOR(S): Komada, Minoru, Tokyo-to, Japan

| PATENT INFORMATION: | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| | US 2001038894 | A1 | 20011108 |
| APPLICATION INFO.: | US 2001-804816 | A1 | 20010313 (9) |

| | NUMBER | DATE |
|-----------------------|---|--|
| PRIORITY INFORMATION: | JP 2000-76354
JP 2000-302729
JP 2000-318013
JP 2000-318014 | 20000314
20001002
20001018
20001018 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | Ladas & Parry, Suite 1200, 224 South Michigan Avenue,
Chicago, IL, 60604 | |
| NUMBER OF CLAIMS: | 14 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 11 Drawing Page(s) | |
| LINE COUNT: | 1968 | |
| AB | The purpose of the present invention is to provide a gas barrier film having extremely excellent gas barrier property while retaining the film thickness at a predetermined thickness. A gas barrier film having a silicon oxide film formed by the plasma CVD method on the one side or both sides of a base material is provided, the silicon oxide film is characterized in that the film is comprised of the rate of components that the number of Oxygen atoms is from 170 to 200 and the number of Carbon atoms is 30 or less to the number of Si atoms of 100, and that further the film has a peak position of IR absorption band based on the stretching vibration of Si-O-Si that exist between 1055 and 1065 cm. ⁻¹ . | |

=> d 5 ibib abs

| |
|---|
| L5 ANSWER 5 OF 19 USPATFULL |
| ACCESSION NUMBER: 2001:121551 USPATFULL |
| TITLE: 3-heteroatom substituted cyclopentadienyl-containing metal complexes and olefin polymerization process |
| INVENTOR(S): Klosin, Jerzy, Midland, MI, United States |
| Kruper, Jr., William J., Sanford, MI, United States |
| Nickias, Peter N., Midland, MI, United States |
| Patton, Jasson T., Midland, MI, United States |
| Wilson, David R., Midland, MI, United States |
| PATENT ASSIGNEE(S): Dow Chemical Company, Midland, MI, United States (U.S. corporation) |

| | NUMBER | KIND | DATE |
|---------------------|-----------------------------------|--|--|
| PATENT INFORMATION: | US 6268444
WO 9806727 | B1 | 20010731
19980219 |
| APPLICATION INFO.: | US 1999-230185
WO 1997-US13170 | 19990115
19970728
19990115
19990115 | (9)
PCT 371 date
PCT 102(e) date |

| | NUMBER | DATE |
|-----------------------|----------------------------------|--------------------------------|
| PRIORITY INFORMATION: | US 1996-34819P
US 1996-23768P | 19961219 (60)
19960808 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Wu, David W. | |
| ASSISTANT EXAMINER: | Harlan, R. | |

NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 5329

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to heteroatom substituted cyclopentadienyl-containing ligands, metal complexes containing these ligands, catalyst systems prepared from catalyst components comprising these metal complexes. The metal complexes contain a "a" heteroatom-Cp bond or a ring heteroatom-Cp bond in the 3-position of the Cp. In preferred metal complexes the ligand is a 3-heteroatom substituted indenyl group. The catalyst systems for olefin polymerization may be used at high temperatures, are highly active and produce high molecular weight polymer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 5 kwic

L5 ANSWER 5 OF 19 USPATFULL

DETD . . . quantity with the amount of oxidized metal complex formed at the working electrode. Preferred supporting electrolytes are tetrahydrocarbylammonium salts of tetrakis(**perfluoroaryl**) borates having from 1 to 10 carbons in each hydrocarbyl or **perfluoroaryl** group, especially tetra(n-butylammonium)tetrakis(pentafluorophenyl) borate.

DETD . . . a radical cation in which the titanium is in a formal oxidation state of (III), which may exist in a **diamagnetic** or **paramagnetic** form as shown below. ##STR10##

=> d 6 ibib abs

L5 ANSWER 6 OF 19 USPATFULL

ACCESSION NUMBER: 2000:109469 USPATFULL
TITLE: Fuel-cells system
INVENTOR(S): Nitta, Shoichiro, Aichi-ken, Japan
Taki, Masayoshi, Konan, Japan
Kawahara, Tatsuya, Toyota, Japan
Miura, Morimichi, Gamagouri, Japan
PATENT ASSIGNEE(S): Toyota Jidosha Kabushiki Kaisha, Toyota, Japan
(non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|---------------|------|--------------|
| PATENT INFORMATION: | US 6106963 | | 20000822 |
| APPLICATION INFO.: | US 1998-72667 | | 19980505 (9) |

| | NUMBER | DATE |
|-----------------------|---|----------|
| PRIORITY INFORMATION: | JP 1997-141059 | 19970515 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Wong, Edna | |
| LEGAL REPRESENTATIVE: | Oblon, Spivak, McClelland, Maier & Neustadt, P.C. | |
| NUMBER OF CLAIMS: | 8 | |
| EXEMPLARY CLAIM: | 1,3 | |
| NUMBER OF DRAWINGS: | 16 Drawing Figure(s); 15 Drawing Page(s) | |

LINE COUNT: 1725
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A fuel-cells system 20 is equipped with an oxygen enrichment unit 34 and supplies air whose oxygen partial pressure has been increased by the oxygen enrichment unit 34 to fuel cells 40 as oxidizing gas. The oxygen enrichment unit 34 is a magnetic oxygen enrichment device that effects oxygen enrichment utilizing the fact that the oxygen molecule is paramagnetic and when magnetized migrates toward a magnetic pole side. Specifically, a magnetic field is generated inside the oxygen enrichment unit 34 by an electromagnet, air compressed by a compressor unit 32 is supplied to the oxygen enrichment unit 34, and compressed oxygen-enriched air is discharged from the vicinity of the magnetic poles in the oxygen enrichment unit 34 and supplied to the fuel cells 40.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 7 ibib abs

L5 ANSWER 7 OF 19 USPATFULL
ACCESSION NUMBER: 2000:12565 USPATFULL
TITLE: Positive-chargeable toner, image forming method and apparatus unit
INVENTOR(S): Fujimoto, Masami, Shizuoka-ken, Japan
Tanikawa, Hirohide, Shizuoka-ken, Japan
Onuma, Tsutomu, Yokohama, Japan
Fujikawa, Hiroyuki, Numazu, Japan
PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Tokyo, Japan (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 6020102 | | 20000201 |
| APPLICATION INFO.: | US 1998-110023 | | 19980702 (9) |

| | NUMBER | DATE |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | JP 1997-178752 | 19970704 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Martin, Roland | |
| LEGAL REPRESENTATIVE: | Fitzpatrick, Cella, Harper & Scinto | |
| NUMBER OF CLAIMS: | 102 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 7 Drawing Figure(s); 7 Drawing Page(s) | |
| LINE COUNT: | 2905 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A positive-chargeable toner is disclosed which has a binder resin, a colorant and a charge control agent. The binder resin contains a styrene copolymer and has an acid value of from 0.5 to 50.0 mg KOH/g, and the charge control agent has an imidazole derivative represented by the Formula (1). Also, an image forming method and an apparatus unit, making use of the positive-chargeable toner, are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 8 ibib abs

L5 ANSWER 8 OF 19 USPATFULL
ACCESSION NUMBER: 1998:138329 USPATFULL
TITLE: Reaction products of lyotropic liquid crystal salt complexes
INVENTOR(S): Elliott, Stanley B., 7125 Connelly Blvd., Walton Hills, OH, United States 44146

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5833877 | | 19981110 |
| APPLICATION INFO.: | US 1996-676775 | | 19960708 (8) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1995-447990, filed on 23 May 1995, now patented, Pat. No. US 5595683 which | | |
| | is a continuation of Ser. No. US 1994-239619, filed on 9 May 1994, now patented, Pat. No. US 5443753 which is a continuation-in-part of Ser. No. US 1992-821084, filed on 16 Jan 1992, now patented, Pat. No. US 5354496 | | |

which is a continuation-in-part of Ser. No. US 1991-642009, filed on 16 Jan 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-562017, filed on 2 Aug 1990, now patented, Pat. No. US 5082588 which is a division of Ser. No. US 1989-444559, filed on 1 Dec 1989, now patented, Pat. No. US 4975249 which is a continuation of Ser. No. US 1987-78186, filed on 27 Jul 1987, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wu, Shean C.
LEGAL REPRESENTATIVE: Marshall & Melhorn
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
LINE COUNT: 4205

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides novel non-polymeric and polymeric complexes and reaction products of lyotropic liquid crystal salts of aroyl acids which

when anhydrous are excellent electrical conductors and superconductors of high critical temperature. The salts can be of various metals but especially of the alkali metals. The invention also provides reaction products of the complexes with copper metal, the products having excellent tarnish-resistant properties which make them suitable for protecting circuit boards and such from corrosion during storage. Copper/polymeric aroylacrylate salt reaction products when amorphous, especially when present in a thin film form, make superconductors of high critical temperature and current. Further, the invention provides

a flexible process for converting various essential, water-bearing components of these complexes and reaction products into stable, anhydrous solutions well suited for applying to various substrates. A modification of the process provides products which can be used to coat substrates which wet poorly. Thin films of the alkali metal polymeric lyotropic liquid crystal salt complexes, because of their affinity for water, which is accompanied by a rapid, sensitive change in electrical resistance, make excellent hygrometric devices. They are especially well

suited for monitoring processes which require that these complexes, reaction products, and complexation products be maintained in the anhydrous state, since the hygrometer sensor material's electrical response parallels that of the product being produced, rising to very high resistances as the anhydrous state is approached.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 9 ibib abs

L5 ANSWER 9 OF 19 USPATFULL
ACCESSION NUMBER: 96:36271 USPATFULL
TITLE: Polymeric shells for medical imaging prepared from synthetic polymers, and methods for the use thereof
INVENTOR(S): Grinstaff, Mark W., Pasadena, CA, United States
Desai, Neil P., Los Angeles, CA, United States
Suslick, Kenneth S., Champaign, IL, United States
Soon-Shiong, Patrick, Los Angeles, CA, United States
Sandford, Paul A., Los Angeles, CA, United States
Merideth, Noma R., Pacific Palisades, CA, United States
States
PATENT ASSIGNEE(S): Vivorx Pharmaceuticals, Inc., Santa Monica, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5512268 | | 19960430 |
| APPLICATION INFO.: | US 1995-486268 | | 19950606 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1994-326116, filed on 19 Oct 1994 which is a continuation of Ser. No. US 1993-35150, | | |

filed on 26 Mar 1993, now patented, Pat. No. US 5362478

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hollinden, Gary E.
LEGAL REPRESENTATIVE: Pretty, Schroeder, Brueggemann & Clark, Reiter, Stephen

E.

NUMBER OF CLAIMS: 37

EXEMPLARY CLAIM: 1

LINE COUNT: 2241

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In accordance with the present invention, compositions comprising imaging agent(s) contained within polymeric shells are provided. Invention compositions are useful, for example, as contrast agents for magnetic resonance imaging (MRI), ultrasonography, and X-ray computer tomography. The polymeric shell diameter is typically approximately 2 microns in diameter. Consequently, these materials have organ specificity due to rapid scavenging by the reticuloendothelial system (RES) or the mononuclear phagocyte (MNP) system upon intravenous injection. Furthermore, polymeric shells of the invention can be used to

measure and monitor local oxygen and temperature. Exemplary contrast agents contemplated for use in the practice of the present invention include fluorinated compounds. Fluorinated compounds in general are hydrophobic and as such have limited water solubility. The invention method permits preparation of such compounds in a biocompatible form suitable for ready delivery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 9 kwic

L5 ANSWER 9 OF 19 USPATFULL

SUMM . . . atoms to be used as CT contrast agent. One particular class of CT contrast agents are brominated fluorocarbons such as **perfluoroctylbromide** (PFOB).

SUMM **Perfluoroctylbromide** has been effectively used in a number of indications as a CT contrast agent including: 1) determination of acute renal. . .

SUMM **Paramagnetic** cations such as, for example, Gd, Mn, and Fe are excellent MRI contrast agents, as suggested above. Their ability to. . .

SUMM . . . contrast. Thus the use of other active MRI nuclei (such as fluorine) can, therefore, be advantageous. The use of certain **perfluorocarbons** in various diagnostic imaging technologies such as ultrasound, magnetic resonance, radiography and computer tomography has been described in an article. . .

SUMM Another medical imaging application for **perfluorocarbon** filled polymeric shells is ultrasonography. This non-invasive, non-iodizing radiation medical imaging technique is safe and currently used world-wide for a. . .

SUMM . . . improve the resolution of the acquired image. One class of materials that have been used as ultrasonography contrast agents are **perfluorohalocarbons**.

SUMM Another medical imaging application for polymeric shells is electron **paramagnetic** resonance (EPR) imaging and spectroscopy. This non-invasive, non-iodizing radiation medical spectroscopy and imaging technique is safe and currently in preclinical. . .

SUMM As a further embodiment of the present invention, **paramagnetic** cations such as Gd, Mn, Fe, and the like can be bound to polyanions, such as alginate, and used as. . .

SUMM . . . structures from the surrounding medium. As used herein, the term imaging agent embraces contrast agents, such as organofluorine compounds, oils, **paramagnetic** compounds, **paramagnetic** or superparamagnetic particles, stable free radicals, and the like.

SUMM . . . desired area. Consequently, it is possible to image where this polymeric shell contrast agent resides within the body as a **diamagnetic** T2 agent. Thus, this unique polymeric shell containing any number of different fluorocarbons can be used as both a .sup.19. . .

SUMM . . . kcal/mole). For comparison, carbon-hydrogen bonds (approximately 100 kcal/mole) are weaker and much more reactive. The

FDA has approved two fluorocarbons, **perfluorotripropyl** amine and **perfluorodecalin**, for medicinal use as blood substitutes under the trade name of Fluosol DA.

SUMM C.sub.x F.sub.2x, such as, for example, **perfluoro-1-hexene** (C.sub.6 F.sub.12), **perfluoro-2-hexene** (C.sub.6 F.sub.12), **perfluoro-3-hexene** (C.sub.6 F.sub.12), and the like,

SUMM cyclo-C.sub.x F.sub.2x, such as, for example, **perfluorocyclohexane** (C.sub.6 F.sub.12), **perfluorocyclooctane** (C.sub.8 F.sub.16), and the like,

SUMM C.sub.x F.sub.2x-2, such as, for example, **perfluoro-1-hexyne** (C.sub.6 F.sub.10), **perfluoro-2-hexyne** (C.sub.6 F.sub.10), **perfluoro-3-hexyne** (C.sub.6 F.sub.10), and the like,

SUMM bicyclo-C.sub.x F.sub.2x-2, such as, for example,

SUMM **perfluorodecalin** (C._{sub.10} F._{sub.18}), and the like, C._{sub.x} F._{sub.2x+2}, such as, for example, **perfluorononane** (C._{sub.9} F._{sub.20}), **perfluorodecane** (C._{sub.10} F._{sub.22}), **perfluorododecane** (C._{sub.12} F._{sub.26}), and the like, C._{sub.x} F._{sub.2x-4}, such as, for example, **perfluoro**-2,4-hexadiene, and the like,

SUMM C._{sub.x} F._{sub.2x+1} A, such as, for example, **perfluorotripropyl** amine [(C._{sub.3} F._{sub.7})._{sub.3} N], **perfluorotributyl** amine [(C._{sub.4} F._{sub.9})._{sub.3} N._{sub.1}], **perfluoro**-tert-tributyl amine, and the like,

SUMM Besides linear, branched-chain and cyclic fluorine-containing compounds as noted above, fluorinated crown ethers (such as, for example, **perfluoro** 12-crown-4, **perfluoro** 15-crown-5, **perfluoro** 18-crown-6, and the like) are also contemplated for use in the practice of the present invention.

SUMM Besides **diamagnetic** T₂ contrast agents, the polymeric shells of the invention can be used as ferromagnetic or **paramagnetic** magnetic resonance contrast agents. These agents introduce a local magnetic field where they are present and consequently change the relaxation. . .

SUMM . . . polymeric shell composed of an iron containing protein, such as hemoglobin. This hemoglobin polymeric shell may contain either a liquid (**perfluorocarbon**, soybean oil, and the like) or may be gas (argon, nitrogen, helium, and the like). This iron containing protein in vivo functions to deliver oxygen to the cell. This protein has **paramagnetic** properties in both its Fe.⁺² deoxy state and Fe.⁺³ state. This **paramagnetic** property will introduce a local magnetic field and disrupt the original magnetic field present. Single molecules of deoxy hemoglobin (as. . . shells according to the present invention that contain approximately 10.^{.sup.7} Hb molecules crosslinked together) have been previously used as a **paramagnetic** susceptibility contrast agent (Ogawa et al., Mag. Reson. Med. 14:68 (1990); Turner et al., Magn. Reson. Med. 22:159 (1991); Wendland. . .

SUMM . . . oxygen detection is based upon the dramatic changes in NMR relaxation rate of .^{.sup.19} F in the presence of a **paramagnetic** species such as oxygen. Since oxygen is **paramagnetic**, it will interact with the fluorine nucleus, increasing the relaxation rate of .^{.sup.19} F from the excited state to the. . .

SUMM . . . system lies, for example, in 1) the use of MRI to obtain information, 2) the use of the oxygen **paramagnetic** influence on the .^{.sup.19} F MRI (NMR) signal, 3) the use of polymeric shells to provide a constant and protective. . .

SUMM . . . be used over a wide temperature range, simply by changing the makeup of the imaging agent composition. For example, pure **perfluoro**-dodecane (C._{sub.12} F._{sub.26}) entrapped in a polymeric shell will undergo a solid to liquid phase transition at the melting point of. . . will have a lower and broader melting point range than the corresponding pure components. Accordingly, for example, formulating (i.e., mixing) **perfluorododecane** with a lower molecular weight fluorocarbon will broaden the melting point range of the encapsulated composition.

SUMM . . . be added can also be used in the practice of the present invention. For example, a dehydration coupling reaction between **perfluoro**-tert-butanol (t-C._{sub.4} F._{sub.9} --OH; PCR CHEMICALS)

with any of the above-described reactive oxygen-containing compounds will produce a molecule that undergoes a . . .
SUMM Ultrasonography contrast agents can be developed with polymeric shells of the invention (i.e., filled with fluorocarbon contrast agent). For example, **perfluorohalocarbons** such as **perfluoroctylbromide** (PFOB) have properties that are significantly different than water, tissues, organs, and bones. One such property is density. PFOB has. . .
SUMM **Perfluoroctylbromide** has been used effectively as an ultrasound agent in a number of indications including: 1) imaging specific tumors in the liver and spleen with PFOB (Mattrey et al., Radiology 145:759-762 (1982)); 2) imaging the liver with **perfluorodecalin** and **perfluorotripropylamine** (Mattrey, R. F. J., Ultrasound Med. 2:173-176 (1983)); 3) evaluating acute myocardial infarction with PFA and PFOB (Mattrey, R. F.. . .
SUMM Besides PFOB encapsulated in a polymeric shell, smaller molecular weight fluorocarbons are equally valuable. For example, **perfluoropentane** can be encapsulated into the polymeric shell. This **perfluorocarbon** is a liquid at room temperature, however at 37.degree. C. it is a gas. Thus, when injected, the **perfluorocarbon** in the polymeric shell will undergo a phase transition, i.e., from liquid to gas. This change in physical state will attenuate the ultrasonic waves, producing good contrast. Thus, **perfluoropentane** and the like encapsulated in polymeric shells will be good contrast agents.
SUMM **Perfluorohalocarbons**, such as **perfluoroctylbromide** (PFOB), are also radiopaque and can be used as contrast agents for X-ray computer tomography. Thus, polymeric shells filled with. . .
SUMM Another medical imaging application for polymeric shells is in electron paramagnetic resonance (EPR) imaging and spectroscopy. This non-invasive, non-iodizing radiation medical spectroscopy and imaging technique is safe and currently in preclinical. . .

=> d 10 ibib abs

L5 ANSWER 10 OF 19 USPATFULL
ACCESSION NUMBER: 96:31573 USPATFULL
TITLE: Non-fluorinated polymeric shells for medical imaging
INVENTOR(S): Grinstaff, Mark W., Pasadena, CA, United States
Desai, Neil P., Los Angeles, CA, United States
Suslick, Kenneth S., Champaign, IL, United States
Soon-Shiong, Patrick, Los Angeles, CA, United States
Sandford, Paul A., Los Angeles, CA, United States
Merideth, Noma R., Pacific Palisades, CA, United States
States
PATENT ASSIGNEE(S): Vivorx Pharmaceuticals, Inc., Santa Monica, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---|
| PATENT INFORMATION: | US 5508021 | | 19960416 |
| APPLICATION INFO.: | US 1994-326116 | | 19941019 (8) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1993-35150, filed on 26 Mar | | 1993, now patented, Pat. No. US 5362478 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hollinden, Gary E.
LEGAL REPRESENTATIVE: Pretty, Schroeder, Brueggemann & Clark, Reiter,
Stephen

E.
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 2169

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In accordance with the present invention compositions comprising imaging

agent(s) contained within polymeric shells are provided. Invention compositions are useful, for example, as contrast agents for magnetic resonance imaging (MRI), ultrasonography, and X-ray computer tomography.

The polymeric shell diameter is typically approximately 2 microns in diameter. Consequently, these materials have organ specificity due to rapid scavenging by the reticuloendothelial system (RES) or the mononuclear phagocyte (MNP) system upon intravenous injection. Furthermore, polymeric shells of the invention can be used to measure and monitor local oxygen and temperature. Exemplary contrast agents contemplated for use in the practice of the present invention include fluorinated compounds. Fluorinated compounds in general are hydrophobic and as such have limited water solubility. The invention method permits preparation of such compounds in a biocompatible form suitable for ready delivery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 11 ibib abs

L5 ANSWER 11 OF 19 USPATFULL
ACCESSION NUMBER: 96:29265 USPATFULL
TITLE: Method for the preparation of fluorocarbon-containing polymeric shells for medical imaging
INVENTOR(S): Grinstaff, Mark W., Pasadena, CA, United States
Desai, Neil P., Los Angeles, CA, United States
Suslick, Kenneth S., Champaign, IL, United States
Soon-Shiong, Patrick, Los Angeles, CA, United States
Sandford, Paul A., Los Angeles, CA, United States
Merideth, Noma R., Pacific Palisades, CA, United States
States
PATENT ASSIGNEE(S): Vivorx Pharmaceuticals, Inc., Santa Monica, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5505932 | | 19960409 |
| APPLICATION INFO.: | US 1995-478986 | | 19950606 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1994-326116, filed on 19 Oct 1994 which is a continuation of Ser. No. US | | |

1993-35150, filed on 26 Mar 1993, now patented, Pat. No. US 5362478

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hollinden, Gary E.

LEGAL REPRESENTATIVE: Pretty, Schroeder, Brueggemann & Clark, Reiter,
Stephen

E.

NUMBER OF CLAIMS: 36

EXEMPLARY CLAIM: 1

LINE COUNT: 2263

AB In accordance with the present invention, compositions comprising imaging agent(s) contained within polymeric shells are provided. Invention compositions are useful, for example, as contrast agents for magnetic resonance imaging (MRI), ultrasonography, and X-ray computer tomography. The polymeric shell diameter is typically approximately 2 microns in diameter. Consequently, these materials have organ specificity due to rapid scavenging by the reticuloendothelial system (RES) or the mononuclear phagocyte (MNP) system upon intravenous injection. Furthermore, polymeric shells of the invention can be used to measure and monitor local oxygen and temperature. Exemplary contrast agents contemplated for use in the practice of the present invention include fluorinated compounds. Fluorinated compounds in general are hydrophobic and as such have limited water solubility. The invention method permits preparation of such compounds in a biocompatible form suitable for ready delivery.

=> d 12 ibib abs

L5 ANSWER 12 OF 19 USPATFULL

ACCESSION NUMBER: 94:104312 USPATFULL

TITLE: Insoluble salts of lanthanides for the visual display using nuclear magnetic resonance, of the gastro-intestinal tract

INVENTOR(S): Aime, Silvio, Milan, Italy
Botta, Mauro, Milan, Italy

PATENT ASSIGNEE(S): Bracco S.p.A., Milan, Italy (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------------------|
| PATENT INFORMATION: | US 5368839 | | 19941129 |
| | WO 9116079 | | 19911031 |
| APPLICATION INFO.: | US 1992-941069 | | 19921106 (7) |
| | WO 1991-EP679 | | 19910409 |
| | | | 19921106 PCT 371 date |
| | | | 19921106 PCT 102(e) date |

| | NUMBER | DATE |
|-----------------------|-----------------|----------|
| PRIORITY INFORMATION: | IT 1990-2002690 | 19900412 |

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Hollinden, Gary E.

LEGAL REPRESENTATIVE: Bucknam and Archer

NUMBER OF CLAIMS: 10

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 425

AB Diagnostic compositions particularly useful for NMR imaging of the gastrointestinal tract, comprise physiologically acceptable aqueous suspensions of insoluble salts of lanthanides, buffered, if required, at

a pH value between 6.0 and 8.5 and which are, if required, formulated with appropriate insoluble organic or inorganic additives and/or with dispersing agents, suspending agents or viscosity-enhancing agents. These compositions are capable of increasing the value of the r.₂/r.₁ ratio, in which r.₁ and r.₂ are the longitudinal and transversal relaxivities of the protons of the surrounding water, thus permitting the production of clear images which have negative contrast and which lack artefacts of metallic type.

=> d 13 ibib abs

L5 ANSWER 13 OF 19 USPATFULL
ACCESSION NUMBER: 90:42485 USPATFULL
TITLE: Metal oxide/hydroxide particles coated with phosphate esters
INVENTOR(S): Martin, Edward S., New Kensington, PA, United States
Wieserman, Larry F., Apollo, PA, United States
PATENT ASSIGNEE(S): Aluminum Company of America, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 4929589 | | 19900529 |
| APPLICATION INFO.: | US 1989-360979 | | 19890602 (7) |
| DISCLAIMER DATE: | 20061003 | | |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1987-23312, filed on 9 Mar 1987, now patented, Pat. No. US 4871411 which is a continuation-in-part of Ser. No. US 1986-946870, filed on 29 Dec 1986, now abandoned | | |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Konopka, Paul E.
LEGAL REPRESENTATIVE: Alexander, Andrew
NUMBER OF CLAIMS: 36
EXEMPLARY CLAIM: 20
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 761

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An active material is disclosed comprising metal oxide/hydroxide particles having chemically bonded to reactive sites on a surface thereof, a monolayer of a phosphorous-containing organic material comprised of a phosphorous-containing group and a carbon-containing group. The bond to the metal oxide/hydroxide particle surface is formed by reaction of the phosphorous-containing group with the metal oxide/hydroxide particle surface, so that the carbon-containing group of the material is oriented away from the metal oxide/hydroxide surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 14 ibib abs

L5 ANSWER 14 OF 19 USPATFULL
ACCESSION NUMBER: 90:40358 USPATFULL
TITLE: Clay magnetic resonance contrast agents for gastrointestinal consumption or introduction
INVENTOR(S): Bryant, Robert G., Pittsford, NY, United States

PATENT ASSIGNEE(S) : Listinsky, Jay J., Rochester, NY, United States
The University of Rochester, Rochester, NY, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 4927624 | | 19900522 |
| APPLICATION INFO.: | US 1987-123007 | | 19871119 (7) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Warden, Robert J. | | |
| ASSISTANT EXAMINER: | Spiegel, Jack | | |
| LEGAL REPRESENTATIVE: | LuKacher, Martin | | |
| NUMBER OF CLAIMS: | 7 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 3 Drawing Figure(s); 3 Drawing Page(s) | | |
| LINE COUNT: | 278 | | |

AB Contrast medium compositions for delineation of bowel during magnetic resonance imaging (MRI) of the abdomen are provided for oral or rectal administration. The compositions consist of aqueous suspensions of clay in finely-divided particles which expose a large surface area to the suspending water and impose a condition of dynamic anisotropy upon the adjacent water, resulting in reduction predominantly in the transverse relaxation time of the water and subsequent loss of signal from the bowel lumen.

=> d 15 ibib abs

L5 ANSWER 15 OF 19 USPATFULL
ACCESSION NUMBER: 89:92249 USPATFULL
TITLE: Supercritical fluid chromatography packing material containing alumina
INVENTOR(S) : Khosah, Robinson P., Point Breeze, PA, United States
Novak, John W., New Kensington, PA, United States
Weaver, Douglas G., Monroeville, PA, United States
Fraser-Milla, Karen R., Wilkinsburg, PA, United States
Burr, Richard R., Leechburg, PA, United States
PATENT ASSIGNEE(S) : Aluminum Company of America, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---|
| PATENT INFORMATION: | US 4880543 | | 19891114 |
| APPLICATION INFO.: | US 1988-214309 | | 19880701 (7) |
| DISCLAIMER DATE: | 20060328 | | |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1987-90880, filed on 31 Aug | | 1987, now patented, Pat. No. US 4816159 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Therkorn, Ernest G.
LEGAL REPRESENTATIVE: Alexander, Andrew
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 657
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of separating organic or organometallic materials

under supercritical fluid conditions, the method comprising the steps
of providing a bed of packing material selected from a metal
oxide/hydroxide support material having phosphorous-containing organic
molecules bonded to reactive sites on said support material, alumina
and alumina-containing mixtures. The materials are introduced to the bed
and a fluid is added to the bed under supercritical fluid conditions. The
fluid removes one of the materials from the bed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 16 ibib abs

L5 ANSWER 16 OF 19 USPATFULL
ACCESSION NUMBER: 89:82585 USPATFULL
TITLE: Active material produced from metal oxide/hydroxide
particles and phosphate esters
INVENTOR(S): Matin, Edward S., New Kensington, PA, United States
Wieserman, Larry F., Apollo, PA, United States
PATENT ASSIGNEE(S): Aluminum Company of America, Pittsburgh, PA, United
States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 4871711 | | 19891003 |
| APPLICATION INFO.: | US 1987-23312 | | 19870309 (7) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1986-946870, filed
on 29 Dec 1986, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Konopka, Paul E. | | |
| LEGAL REPRESENTATIVE: | Alexander, Andrew, Taylor, John P. | | |
| NUMBER OF CLAIMS: | 38 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 1 Drawing Figure(s); 1 Drawing Page(s) | | |
| LINE COUNT: | 760 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An active material is disclosed comprising metal oxide/hydroxide
particles having chemically bonded to reactive sites on a surface
thereof, a monolayer of a phosphorous-containing organic material
comprised of a phosphorous-containing group and a carbon-containing
group. The bond to the metal oxide/hydroxide particle surface is formed
by reaction of the phosphorous-containing group with the metal
oxide/hydroxide particle surface, so that the carbon-containing group
of the material is oriented away from the metal oxide/hydroxide surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 17 ibib abs

L5 ANSWER 17 OF 19 USPATFULL
ACCESSION NUMBER: 89:23115 USPATFULL
TITLE: Supercritical fluid chromatography packing material
INVENTOR(S): Khosah, Robinson P., Point Breeze, PA, United States
Novak, John W., New Kensington, PA, United States

PATENT ASSIGNEE(S) :

Weaver, Douglas G., Monroeville, PA, United States
 Fraser-Milla, Karen R., Wilkinsburg, PA, United States
 Burr, Richard R., Leechburg, PA, United States
 Aluminum Company of America, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 4816159 | | 19890328 |
| APPLICATION INFO.: | US 1987-90880 | | 19870831 (7) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Therkorn, Ernest G. | | |
| LEGAL REPRESENTATIVE: | Alexander, Andrew | | |
| NUMBER OF CLAIMS: | 21 | | |
| EXEMPLARY CLAIM: | 21 | | |
| NUMBER OF DRAWINGS: | 12 Drawing Figure(s); 5 Drawing Page(s) | | |
| LINE COUNT: | 733 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of separating organic or organometallic materials under supercritical fluid conditions, the method comprising the steps of providing a bed of packing material selected from a metal oxide/hydroxide support material having phosphorous-containing organic molecules bonded to reactive sites on said support material, alumina and alumina-containing mixtures. The materials are introduced to the bed and a fluid is added to the bed under supercritical fluid conditions. The fluid removes one of the materials from the bed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 18 ibib abs

L5 ANSWER 18 OF 19 USPATFULL

ACCESSION NUMBER: 88:77470 USPATFULL
 TITLE: Adsorbent comprising metal oxide/hydroxide particles reacted with one or more phosphorous-containing materials having selected organic radicals attached thereto
 INVENTOR(S): Wieserman, Larry F., Apollo, PA, United States
 Wefers, Karl, Apollo, PA, United States
 Cross, Kathryn, Murrysville, PA, United States
 Martin, Edward S., New Kensington, PA, United States
 PATENT ASSIGNEE(S): Aluminum Company of America, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 4788176 | | 19881129 |
| APPLICATION INFO.: | US 1987-23423 | | 19870309 (7) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1986-946870, filed on 29 Dec 1986, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Shine, W. J. | | |
| LEGAL REPRESENTATIVE: | Alexander, Andrew, Taylor, John P. | | |
| NUMBER OF CLAIMS: | 52 | | |

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 923

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An active material is disclosed comprising metal oxide/hydroxide particles having chemically bonded to reactive sites on a surface thereof, a monolayer of a phosphorous-containing organic material comprised of a phosphorous-containing group and a carbon-containing group. The bond to the metal oxide/hydroxide surface is formed by reaction of the phosphorous-containing group with the metal oxide/hydroxide particle surface, so that the carbon-containing group of the material is oriented away from the metal oxide/hydroxide surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 19 ibib abs

L5 ANSWER 19 OF 19 USPATFULL
ACCESSION NUMBER: 85:57955 USPATFULL
TITLE: Liposomes containing modified cholesterol for organ targeting
INVENTOR(S): Ryan, Patrick J., Worcester, MA, United States
Davis, Michael A., Westwood, MA, United States
Melchior, Donald L., Framingham, MA, United States
PATENT ASSIGNEE(S): Trustees University of Massachusetts, Amherst, MA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|----------------------|------|--------------|
| PATENT INFORMATION: | US 4544545 | | 19851001 |
| APPLICATION INFO.: | US 1983-505696 | | 19830620 (6) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Nucker, Christine M. | | |
| LEGAL REPRESENTATIVE: | Cook, Paul J. | | |
| NUMBER OF CLAIMS: | 12 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 201 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Phospholipid liposomes are provided having an outer layer including a cholesterol derivative such as a cholesterol ester and an aqueous medium confined by the layer which includes a tracer agent, a cytotoxic agent or a therapeutic agent. The liposomes are adapted for specific organ targeting.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 19 kwic

L5 ANSWER 19 OF 19 USPATFULL
DETD . . . metrizamide, iothalamate or the like which are useful in fluoroscopy, plain film X-ray, angiography, digital subtraction angiography and computed tomography; diamagnetic and paramagnetic substances such as perfluorohydrocarbons, nitroxide free radicals, phosphates, magnesium, gadolinium or the like, which are useful in nuclear magnetic resonance imaging or gaseous

agents.

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